

# Small Arms Ammunition Manufacturing: 2002

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## 2002 Economic Census

*Manufacturing*

Industry Series



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U.S. Department of Commerce  
Economics and Statistics Administration  
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## CONTENTS

Introduction to the Economic Census .....	v
Manufacturing .....	ix

### Tables

1. Historical Statistics for the Industry: 2002 and Earlier Years ...	1
2. Industry Statistics for Selected States: 2002 .....	2
3. Detailed Statistics by Industry: 2002 .....	3
4. Industry Statistics by Employment Size: 2002.....	4
5. Industry Statistics by Primary Product Class Specialization: 2002 .....	5
6a. Products Statistics: 2002 and 1997 .....	6
6b. Product Class Shipments for Selected States: 2002 and 1997 .	--
7. Materials Consumed by Kind: 2002 and 1997.....	8

### Appendixes

A. Explanation of Terms .....	A-1
B. NAICS Codes, Titles, and Descriptions .....	B-1
C. Methodology .....	C-1
D. Geographic Notes .....	--
E. Metropolitan and Micropolitan Statistical Areas .....	--
F. Comparability of Product Classes and Product Codes: 2002 to 1997 .....	F-1

-- Not applicable for this report.

# Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year <sup>1</sup>	Com- panies <sup>2</sup>	All estab- lish- ments <sup>3</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)	
			Number <sup>4</sup>	Payroll (\$1,000)	Number <sup>4</sup>	Hours (1,000)	Wages (\$1,000)					
332992, Small arms ammunition manufacturing .....	2002..	110	112	6 816	271 931	5 301	11 080	196 950	766 945	392 104	1 114 343	16 827
	2001..	N	N	6 947	258 054	5 239	10 691	176 602	697 575	425 328	1 139 560	20 116
	2000..	N	N	7 222	277 847	5 556	10 813	193 642	603 224	456 922	1 032 798	37 218
	1999..	N	N	7 235	277 616	5 546	11 448	188 719	672 898	437 722	1 124 881	33 813
	1998..	N	N	7 145	257 981	5 464	10 898	172 800	631 022	370 920	1 018 425	20 406
	1997..	107	114	7 135	254 731	5 386	10 669	172 743	610 244	374 810	976 944	26 740

<sup>1</sup>Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

<sup>2</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>3</sup>Includes establishments with payroll at any time during the year.

<sup>4</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 2. Industry Statistics for Selected States: 2002**

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E <sup>1</sup>	All establishments <sup>2</sup>		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)				
332992, Small arms ammunition manufacturing												
United States .....	—	112	22	6 816	271 931	5 301	11 080	196 950	766 945	392 104	1 114 343	16 827
Missouri .....	—	5	4	1 332	60 062	1 087	2 159	45 454	230 052	15 553	243 122	860
Ohio .....	2	6	1	100	1 907	70	123	1 415	6 607	3 934	10 643	131

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

**Table 3. Detailed Statistics by Industry: 2002**

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
<b>332992, Small arms ammunition manufacturing</b>	
Companies <sup>1</sup> .....	number.. 110
All establishments <sup>2</sup> .....	number.. 112
Establishments with 1 to 19 employees .....	number.. 90
Establishments with 20 to 99 employees .....	number.. 14
Establishments with 100 employees or more .....	number.. 8
All employees <sup>3</sup> .....	number.. 6 816
Total compensation .....	\$1,000.. 365 172
Annual payroll .....	\$1,000.. 271 931
Total fringe benefits .....	\$1,000.. 93 241
Production workers, average for year .....	number.. 5 301
Production workers on March 12 .....	number.. 5 127
Production workers on May 12 .....	number.. 5 204
Production workers on August 12 .....	number.. 5 427
Production workers on November 12 .....	number.. 5 432
Production worker hours .....	1,000.. 11 080
Production worker wages .....	\$1,000.. 196 950
Total cost of materials .....	\$1,000.. 392 104
Materials, parts, containers, packaging, etc., used .....	\$1,000.. 358 188
Resales .....	\$1,000.. 13 685
Purchased fuels .....	\$1,000.. 7 364
Purchased electricity .....	\$1,000.. 11 374
Contract work .....	\$1,000.. 1 493
Quantity of electricity purchased for heat and power .....	1,000 kWh.. 258 950
Quantity of electricity generated less sold for heat and power .....	1,000 kWh.. -
Total value of shipments .....	\$1,000.. 1 114 343
Primary products value of shipments .....	\$1,000.. 1 052 060
Secondary products value of shipments .....	\$1,000.. 23 263
Total miscellaneous receipts .....	\$1,000.. 39 020
Value of resales .....	\$1,000.. 19 953
Contract receipts .....	\$1,000.. D
Other miscellaneous receipts .....	\$1,000.. D
Primary products specialization ratio .....	percent.. 98
Value of primary products shipments made in all industries .....	\$1,000.. 1 097 538
Value of primary products shipments made in this industry .....	\$1,000.. 1 052 060
Value of primary products shipments made in other industries .....	\$1,000.. 45 478
Coverage ratio .....	percent.. 96
Value added .....	\$1,000.. 766 945
Total inventories, beginning of year .....	\$1,000.. 192 150
Finished goods inventories .....	\$1,000.. 107 462
Work-in-process inventories .....	\$1,000.. 32 935
Materials and supplies inventories .....	\$1,000.. 51 753
Total inventories, end of year .....	\$1,000.. 238 399
Finished goods inventories .....	\$1,000.. 132 455
Work-in-process inventories .....	\$1,000.. 52 648
Materials and supplies inventories .....	\$1,000.. 53 296
Gross value of depreciable assets (acquisition costs) at beginning of year .....	\$1,000.. '402 115
Total capital expenditures (new and used) .....	\$1,000.. '16 827
Buildings and other structures (new and used) .....	\$1,000.. '1 181
Machinery and equipment (new and used) .....	\$1,000.. '15 646
Automobiles, trucks, etc., for highway use .....	\$1,000.. '253
Computers and peripheral data processing equipment .....	\$1,000.. '1 057
All other expenditures for machinery and equipment .....	\$1,000.. '14 336
Total retirements .....	\$1,000.. '10 208
Gross value of depreciable assets at end of year .....	\$1,000.. '408 734
Depreciation charges during year .....	\$1,000.. '25 779
Total rental payments .....	\$1,000.. 7 530
Buildings and other structures .....	\$1,000.. 6 015
Machinery and equipment .....	\$1,000.. 1 515
Total other expenses <sup>4</sup> .....	\$1,000.. 77 062
Response coverage ratio <sup>5</sup> .....	percent.. 98
Repair and maintenance services of buildings and/or machinery <sup>4</sup> .....	\$1,000.. 18 383
Communications services <sup>4</sup> .....	\$1,000.. 1 399
Legal services <sup>4</sup> .....	\$1,000.. 2 488
Accounting, auditing, and bookkeeping services <sup>4</sup> .....	\$1,000.. 222
Advertising and promotional services <sup>4</sup> .....	\$1,000.. 5 970
Expensed computer hardware and supplies and purchased computer services <sup>4</sup> .....	\$1,000.. 660
Refuse removal (including hazardous waste) services <sup>4</sup> .....	\$1,000.. 5 306
Management consulting and administrative services <sup>4</sup> .....	\$1,000.. 4 321
Taxes and license fees <sup>4</sup> .....	\$1,000.. 3 751
All other expenses <sup>4</sup> .....	\$1,000.. 34 562

<sup>1</sup>For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

<sup>4</sup>Based on 2002 Annual Survey of Manufactures (ASM) sample data.

<sup>5</sup>A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 4. Industry Statistics by Employment Size: 2002**

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E <sup>1</sup>	All establishments <sup>2</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number <sup>3</sup>	Payroll (\$1,000)	Number <sup>3</sup>	Hours (1,000)	Wages (\$1,000)				
332992, Small arms ammunition manufacturing											
All establishments .....	—	112	6 816	271 931	5 301	11 080	196 950	766 945	392 104	1 114 343	'16 827
Establishments with—											
1 to 4 employees .....	9	66	c	D	D	D	D	D	D	D	361
5 to 9 employees .....	8	14	106	4 689	78	151	2 951	10 425	7 089	18 265	'475
10 to 19 employees .....	6	10	140	5 214	102	187	3 309	14 542	7 946	20 399	'1 214
20 to 49 employees .....	4	9	300	10 724	192	376	5 580	27 268	18 385	45 403	'1 223
50 to 99 employees .....	—	5	413	13 135	294	592	8 441	41 010	19 505	58 377	'680
100 to 249 employees .....	—	3	493	19 350	397	840	14 204	36 494	47 767	74 713	D
250 to 499 employees .....	—	—	—	—	—	—	—	—	—	—	—
500 to 999 employees .....	—	3	2 504	89 152	1 893	4 086	63 832	263 474	167 814	405 302	7 069
1,000 to 2,499 employees .....	—	2	h	D	D	D	D	D	D	D	D
2,500 employees or more .....	—	—	—	—	—	—	—	—	—	—	—
Administrative records <sup>4</sup> .....	9	74	203	8 296	153	296	5 557	20 403	12 281	32 680	'642

<sup>1</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

<sup>2</sup>Includes establishments with payroll at any time during the year.

<sup>3</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

<sup>4</sup>Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 5. Industry Statistics by Primary Product Class Specialization: 2002**

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments <sup>1</sup>	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number <sup>2</sup>	Payroll (\$1,000)	Number <sup>2</sup>	Hours (1,000)	Wages (\$1,000)				
332992	Small arms ammunition manufacturing .....	112	6 816	271 931	5 301	11 080	196 950	766 945	392 104	1 114 343	'16 827
3329920	Small arms ammunition .....	112	6 816	271 931	5 301	11 080	196 950	766 945	392 104	1 114 343	'16 827

<sup>1</sup>Includes establishments with payroll at any time during the year.

<sup>2</sup>Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. **Products Statistics: 2002 and 1997**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
332992	Small arms ammunition manufacturing .....	2002.. N 1997.. N	X X	X X	1 097 538 889 302
3329920	Small arms ammunition .....	2002.. N 1997.. N	X X	X X	1 097 538 889 302
33299201	Rimfire rifle/pistol cartridges .....	2002.. N 1997.. N	X X	X X	257 435 112 076
3329920101	Rimfire rifle/pistol cartridges ..... mil units..	2002.. 9 1997.. 3	X X	P4 066.4 S	257 435 112 076
33299202	Centerfire rifle cartridges .....	2002.. N 1997.. N	X X	X X	135 824 101 009
3329920206	Centerfire rifle cartridges ..... mil units..	2002.. 8 1997.. 6	X X	345.8 270.1	135 824 101 009
33299203	Centerfire pistols, including cartridges interchangeable between rifles and pistols (30 mm or less, 1.18 in. or less) .....	2002.. N 1997.. N	X X	X X	182 279 166 664
3329920311	Centerfire pistols, including cartridges interchangeable between rifles and pistols (30 mm or less, 1.18 in. or less) ..... mil units..	2002.. 6 1997.. 8	X X	1 424.7 1 148.7	182 279 166 664
33299204	Shotgun shells .....	2002.. N 1997.. N	X X	X X	218 116 187 936
3329920416	Shotgun shells ..... mil units..	2002.. 8 1997.. 4	X X	1 191.6 1 018.9	218 116 187 936
33299205	Small arms ammunition primers (30 mm or less, 1.18 in. or less) .....	2002.. N 1997.. N	X X	X X	28 022 28 295
3329920521	Small arms ammunition primers (30 mm or less, 1.18 in. or less) ..... mil units..	2002.. 5 1997.. 4	X X	2 043.0 2 221.6	28 022 28 295
33299206	All other ammunition components .....	2002.. N 1997.. N	X X	X X	116 860 157 183
3329920626	All other ammunition components .....	2002.. 19 1997.. 21	X X	X X	116 860 157 183
33299207	Other ammunition products, including industrial shells and cartridges, air gun ammunition, percussion caps .....	2002.. N 1997.. N	X X	X X	108 927 101 388
3329920731	Other ammunition products, including industrial shells and cartridges, air gun ammunition, percussion caps .....	2002.. 16 1997.. 13	X X	X X	108 927 101 388
3329920Y	Small arms ammunition, nsk, total .....	2002.. N 1997.. N	X X	X X	50 075 34 751
3329920YWW	Small arms ammunition, nsk, for nonadministrative-record establishments .....	2002.. N 1997.. N	X X	X X	17 656 13 311
3329920YWY	Small arms ammunition, nsk, for administrative-record establishments .....	2002.. N 1997.. N	X X	X X	32 419 21 440

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.



Table 6b. **Product Class Shipments for Selected States: 2002 and 1997**

[Not applicable for this report.]

**Table 7. Materials Consumed by Kind: 2002 and 1997**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
332992	Small arms ammunition manufacturing		
00900001	Total materials .....2002..	X	358 188
	.....1997..	X	348 470
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....2002..	X	293
	.....1997..	X	D
33200095	Other fabricated metal products (excluding castings and forgings) .....2002..	X	61 610
	.....1997..	X	D
33151001	Iron and steel castings (rough and semifinished) .....2002..	X	D
	.....1997..	X	D
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) .....2002..	X	D
	.....1997..	X	1 705
33152003	Other nonferrous metal castings, rough and semifinished (including aluminum and aluminum-base alloy) .....2002..	X	23 455
	.....1997..	X	D
33120001	Steel shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	11 154
	.....1997..	X	18 621
33142111	Copper and copper-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	48 757
	.....1997..	X	57 250
33100038	Aluminum and aluminum-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	D
	.....1997..	X	N
33100082	Other nonferrous metal shapes and forms (excluding aluminum and aluminum-base alloy and copper and copper-base alloy castings, forgings, and fabricated metal products) .....2002..	X	13 560
	.....1997..	X	N
32592011	Smokeless powder .....2002..	X	51 674
	.....1997..	X	55 551
32521105	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. ....2002..	X	15 131
	.....1997..	X	7 844
32500065	Other chemicals and allied products .....2002..	X	9 897
	.....1997..	X	D
32100019	Rough and dressed lumber .....2002..	X	D
	.....1997..	X	D
32221001	Paperboard containers, boxes, and corrugated paperboard .....2002..	X	22 840
	.....1997..	X	21 128
32610011	Fabricated plastics products (excluding gaskets) .....2002..	X	D
	.....1997..	X	11 831
33351501	Machine tool accessories, including cutting tools .....2002..	X	7 177
	.....1997..	X	D
00190055	Electronic, hydraulic, and mechanical subassemblies .....2002..	X	D
	.....1997..	X	D
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	56 797
	.....1997..	X	45 884
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	17 228
	.....1997..	X	11 442

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.